

## Justifying non-compliance

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# **Justifying non-compliance: the morality of illegalities in small scale fisheries of Lake Victoria, East Africa**

## **Keywords:**

Non-compliance, small scale fisheries, Lake Victoria, illegal fishing, modes of justification

## **1. Introduction**

Non-compliance is one of the central challenges of fisheries management. Fishers are subject to numerous regulations that constrain their opportunities to earn income, and temptations and opportunities for offending repeatedly occur (Kuperan & Sutinen 1998). The use of fishing gears with incorrect mesh size, catching undersized fish, dynamite fishing and poison, destroying flora and fauna, and conducting fishing activities during closed seasons and in protected breeding grounds, challenge the sustainability of fisheries—not only because of the negative environmental effects, but also because non-compliance can have a domino effect (Arias et al. 2015). Non-compliance may result in unsustainable fishing and reduced stocks, threatening the very livelihood source on which fishers depend. Why then do fishers use fishing methods which in the long run deprive them of the source of their livelihoods? The scholarship on small-scale fisheries draws on two areas of theory to explain non-compliance, providing instrumental and normative explanations.

The instrumental approach explains non-compliance using the rational choice framework, being “based on the assumption that the individual primarily responds to the immediate benefits of compliance or non-compliance behaviour” (Raakjær Nielsen 2003: 425). Based on the tradition of critical criminology, which in the 1970s developed a political economy approach to crime (Hauck 2008), it is assumed that fishers make decisions through cost-benefit analysis and use illegal methods when potential benefits outweigh perceived costs. The normative approach on the other hand argues against the “under-socialized” conception of social action (Granovetter 1985), advocating an expansion of the utility-based rational choice model through incorporating a sub-set of potential factors from relevant disciplines (Al-Subhi et al. 2013). The instrumental approach has most often been associated with attempts to reduce non-compliance by increasing monitoring, control and surveillance in order to increase the potential of catching illegal fishers, whereas the normative approach has led to an alternative route, promoting regulation that will be supported by fishers (Raakjær Nielsen 2003). By stressing the need to take into account sources of motivation other than only external incentives, normative theorists therefore sought to offer a more nuanced approach to explaining fishers’ behaviour.

Despite a burgeoning literature on normative explanations for compliance (Kuperan & Sutinen 1998; Gezelius 2004; Hauck & Kroese 2006; Hauck 2008; Eggert & Lokina 2010; Gezelius & Hauck 2011; Jagers et al. 2012; Al-Subhi et al. 2013; Arias et al. 2015; Boonstra et al. 2017), the contributing factors through which norms affect fishers’ behaviour remain insufficiently elaborated. Al-Subhi et al. (2013), for example, show why fishers follow the rules—to avoid sanctions, because of peer pressure, their personal morality—but evidence on why fishers break rules is lacking. Kuperan and Sutinen (1998: 312) refer to the “sense of moral obligation” and Raakjær Nielsen (2003: 427) talks of “fishers’ personal moral and perception of what is right and wrong”, but the exact mechanisms through which normative reasoning translates into non-compliance are not apparent. Paradoxically, by examining

compliance, literature does not at the same time necessarily explain non-compliance, as the latter is conceived simply as an outcome of “moral deficit”, rather than an action founded on alternative concepts of fairness.<sup>1</sup> Although these studies in a broad sense link non-compliance to the issue of morality, they do not explain how fishers’ behaviour depends on following different modes of moral justification.

In this paper, the modes of moral justification are studied inductively and through a pluralistic framework, drawing on theoretical advancements in the school of pragmatic sociology (Bénatouil 1999; Wagner 1999; Boltanski and Thévenot 2006). The paper identifies four such modes of justification which act as drivers of illegalities: specific local-ecological knowledge (the principle of superfluosity), general legitimacy of the state apparatus (the principle of autonomy), lack of social trust (the principle of futility) and poverty (the principle of necessity). The given typology derives from literature and is generated from data generated from fieldwork, with the interview schedule including probes on modes of justification identified in the literature. (Although not all patterns were equally represented among the respondents, and some were almost absent from findings, this was nonetheless included in the typology as earlier literature reported its importance.) The main contribution of this paper therefore consists in providing a systematic overview of moral resources used to ground the use of illegal practices, rooted in competing conceptions of common good. This is crucial for improving the cost effectiveness of fisheries enforcement, given that different modes of non-compliant behaviour require tailor-made solutions, rather than a one-size-fits-all approach.

Fieldwork on which this paper draws was undertaken on Lake Victoria, East Africa. Lake Victoria, the second largest freshwater lake in the world, is a major fisheries resource and was chosen for the research as it exemplifies well the challenges of fisheries management. It is believed that a prevalence of illegalities threatens the sustainability of the fisheries (LVFO 2015; 2016). Prior to the late 1990s, fisheries management on the lake was centralised, determined on a country-by-country basis, and included little or no community participation. A lake-wide harmonised co-management approach was introduced from the late 1990s, where resource users (including boat owners, crew and traders) at fish landing sites work with government to manage the fishery and contribute to policy development. This approach led to the formation of community-based Beach Management Units (BMUs) around the lake, with an elected committee and membership composed of everyone working within fisheries at a fish landing site. Despite the introduction of co-management, the extent of illegalities in the lake fisheries is not believed to have decreased (LVFO 2015; 2016).

The next section describes the theoretical framework, followed by the methods and data used in the research, and the results, which are presented by describing four patterns that act as drivers of non-compliance. In the discussion section, the findings are situated within the context of the literature on fisheries compliance. Finally, the conclusion sets out the contribution of the paper to existing knowledge and identifies areas where further research could usefully be undertaken.

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<sup>1</sup> This is not identical, but is related to the tendency to equate instrumental behaviour with non-compliance, and conversely, to associate normative perspectives to compliance. For instance: ‘The normative perspective emphasizes what individuals consider just and moral, instead of what is in their self-interest. Individuals tend to comply with the law to the extent that they perceive the law as appropriate and consistent with their internalized norms’ (e.g. Kuperan & Sutinen 1998: 312) and ‘in situations with overcapacity the fishers can be expected to have an instrumental rationality and be driven by economic motives. This creates incentives for non-compliance’ (Raakjær Nielsen 2003: 427). However, these dichotomies are not overlapping: the dichotomy ‘instrumental vs normative’ denotes different conceptions of human agency, while the dichotomy ‘compliance vs non-compliance’ refers to the outcome of the agency. That is why ontological perspectives can lead both ways, instrumental reasoning to compliance, and normative to non-compliance.

## 2. Theoretical framework

According to normative arguments, fishers who engage in illegal fishing do so because they follow internal incentives (their values, tradition, or local conventions that are in disaccord with fishing regulations), which undermines the legitimacy of the rules governing fishing activities.<sup>2</sup> But what are the exact mechanisms through which normative reasoning translates into non-compliance? This issue is explored by analysing moral framing of non-compliant behaviour.

Gezelius (2004) contributed significantly in this regard by tracing how morality of compliance is connected to perceived moral obligation to protect the common good. He pointed out that the moral principle of rule compliance can contradict the moral principle of survival, recognizing moral barriers which exist between various non-compliant practices which is associated with the purpose of fishing. Whereas illegal fishing for subsistence was directed at satisfying personal needs of the fishers, and therefore limited in scope, illegal commercial fishing poaching was condemned and socially sanctioned, as in the eyes of the fisherfolk it was seen as a threat to the common good. However, what if there are multiple conceptions of ‘common good’ within fishing communities? Survival of the fish stock in functionalist terms could be taken as an ultimate common good, given it is the precondition for the survival of the community at large (not only in terms of physical survival of its members, but survival in broader cultural and social meaning—mores, tradition, overall way of life), yet at the same time, it is important to bear in mind that collectivities are rarely constituted by a single social order.

To take this into account, this paper embraced the theoretical framework developed by Boltanski and Thévenot (1999; 2006). Rather than overemphasizing the impact of the social on the individual, and sliding into the assumption that society is unified and built on consensual grounds, their conception of society is essentially broken into different, often antagonistic worlds. Boltanski and Thévenot (1999; 2006) developed a grammar of different modes of justification, which they called “orders of worth”. This typology consists of systematic and coherent principles which are mutually incompatible with, and irreducible to, each other (Wagner 1999: 343). Furthermore, the choice of the respective mode of justification is not attached to collectivities but to situations, which then oblige individuals to shift between different modes. In order to act in a normal way, an average person must be able to shift between situations which require different orders of worth (1999: 365). Thus, instead of being prisoners of Bourdieu’s habitus (Bourdieu 1977), Boltanski and Thévenot’s agents are capable of voluntarily switching between different modes of justification, dependent on respective circumstances.

In the case of fisheries compliance, this is in line with the approach developed by Boonstra et al. (2017). In their typology of fishers’ responses to regulation, they warn that “in reality, people will embody a repertoire of posturing that they deploy based on a changing and complex social-ecological environment” (2017: 10), indicating that the different responses are often employed by same actors in different situations.

To conclude, in order to provide a detailed explanation of how social norms affect fishers’ choice of illegal fishing methods, this paper explores how fishers justify non-compliance in

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<sup>2</sup> Raakjær Nielsen argues that ‘in the instrumental approach, it is important that the regulations and the distribution of fishing rights are perceived as legitimate’ (2003: 427). However, if legitimacy indeed is a normative phenomenon, then it remains unclear how it can be combined with a view that people act only according to external incentives, which are by definition non-normative? In this respect, non-compliance can be studied in the context of legitimacy only using the normative approach.

moral terms. However, rather than operating with a simplified, binary concept of morality (which can, but does not have to be attached to functionalist assumptions—the need to protect the common good), this paper is built on the theoretical framework which allows analysing how actions are founded on alternative concepts of fairness. This in turn provides a more differentiated, and at the same time more robust model of fishers' attitudes towards regulation.

### 3. Methodology

The research was carried out between April and June 2015 at 18 landing sites, 6 in each country that borders the lake – Kenya, Tanzania and Uganda. The landing sites were chosen to reflect the diversity of Lake Victoria fisheries communities (geographical diversity, inclusion of both island and mainland landing sites, different size), and to have an active fishery of at least one major commercial species (Nile perch, tilapia and dagaa).

At each landing site a sample of up to six fisheries' stakeholders were interviewed in the local language. This included interviews with three groups of respondents, boat crew, boat owners, and fisheries traders and processors, the main occupational groups of Lake Victoria fisheries. 36 boat crew, 36 boat owners, and 32 traders and processors were interviewed. The sampling approach was a mix of purposive sampling and convenience sampling within a stratified sampling approach for the occupation-based respondents. The interviewers identified respondents with the help of BMU leaders, which may have brought in an element of bias. However, the limited time in the field meant due to financial constraints meant that respondents were chosen based on availability, and by comparing data across landing sites and triangulating between interviews, the data has been analysed and interpreted with care. Furthermore, interviews were also conducted with 18 BMU leaders (each for landing site in which the fieldwork was carried out), and 12 fisheries officers (6 in Uganda, 4 in Kenya and 2 in Tanzania).

A semi-structured interview schedule was used, with some adjustments for the three occupational groups to address occupation-specific issues. The interviews lasted around an hour. After each interview, interviewers completed a form containing basic socio-demographic data and interviewers' observations, which on some occasions provided important contextual data. This was piloted and finalised before the fieldwork commenced. The interviews were recorded in the original language of the interview, and then transcribed and translated to English by the interviewers. Finally, the transcripts were coded and analysed in NVivo, a software specialized for qualitative analysis.

The sample included 85 males and 19 female respondents, with the gender imbalance being a consequence of the occupation based sampling. The majority of boat crew and boat owners are men, while most women work as fish traders and processors (LVFO undated). The age of the respondents ranged from 19 to 66 years, with the respondents reporting on average 11 years of experience working in their profession. Most of the respondents lived permanently at the landing site at which they were interviewed, with the exception of 15 respondents. Quotes used in this article were selected to include responses from different occupational groups and to represent various landing sites; the country and occupational group is given as the source of the quotation,<sup>3</sup> with the number of the landing site, from 1 to 6 in each country.

Since the interviews included potentially incriminating topics (e.g. illegal fishing practices) ethical principles and procedures were utilized to address possible ethical issues concerning

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<sup>3</sup> Occupation and stakeholder codes: Bc for boat crew, Bo for boat owners, Ft for fish traders and processors, BMU for BMU leaders, and Fo for fisheries officers. Country codes: Ug for Uganda, Ke for Kenya, Tz for Tanzania.

the participation of individuals in the research process and the storage of data resulting from their participation. Firstly, the interview data were recorded under unique alphanumeric codes for each respondent; this rendered it impossible to link a respondent as an individual physical entity to the audio and textual data stored about them. Secondly, all respondents were asked to give informed verbal consent, after the interviewer had fully explained the nature, consequences and potential risks of the research, and once the interviewers were fully confident that the respondent had understood all the relevant information.

#### **4. Drivers of non-compliance**

##### *4.1. Local-ecological knowledge: the principle of superfluity*

The first driver of non-compliance considered relates to perceptions of fish stock condition and therefore whether regulations are seen as necessary. Perceptions of fish stock condition are related to “local ecological knowledge” (LEK), defined as an intricate knowledge which resource users possess of their local resource base (Crona and Bodin 2006; 2010). Crona and Bodin explored to what extent LEK varies across different groups of fishers operating in the coastal seascape. Both as a consequence of the specific conditions in which they worked, and due to the influence of peers—the analysis showed strong tendencies for within-group communications among most occupational groups—different occupational groups were prone to express different opinions on key ecological issues. This is exemplified by the deep-sea fishers, who target pelagic stocks that are less vulnerable to over-fishing on a local scale, believing that stocks are not overexploited, in contrast to the views of others more reliant on inshore fisheries. This belief contributed to a lack of willingness to support collective action to address depleting fish stocks.

The relationship of LEK to compliance motivation lies in the convincing logic that local users are more likely to comply with regulations that aim to maintain fish stocks if the fisheries stakeholders believe the fish stock is endangered. But what if actors do not believe that fish stocks are depleted? In this case, it becomes morally justifiable to non-comply with the regulation as it is seen as superfluous. This was reported by several respondents on Lake Victoria who expressed doubts about the widely reported stock depletion, blaming the occasional shortages of fish on seasonal fluctuations: “Sometimes there is fish and sometimes there is no fish. There are varieties. It is seasonal, in one there is and in another it is less. I cannot say that there will be no fish in future. (...) The government should leave us alone and let us fish” (BoKe1). And, another stated “now what can I say? When you tell them, they say, these things were thrown up by the government. When you say fish is depleting, they say no, how is fish depleting? So you find here traditionally, people believe that fish cannot deplete” (BMUUG1). A similar pattern was reported by Boonstra et al. (2017), according to whom the disbelief that the stock is being depleted was related to the general distrust in science: “Some fishers that we interviewed expressed their mistrust bluntly—‘No, I don’t trust research: I only trust what comes in my nets,’ while others take more time to point out what they see as problems with scientific measurement: ‘Yes, it [the fish] moves of course and we move too, but the researchers don’t. They don’t move, they have their sample stations’” (Boonstra et al. 2017: 9).

However, the majority of respondents expressed their belief that fish stocks of the lake were seriously depleted: “Fishing is getting difficult. Fishing becomes more difficult as time goes by. I used to see fish playing here in the water. They are not seen nowadays. You need an engine now. You need a lot of money to buy bait and petrol. You go to fish in Uganda and pay fees to Uganda. Fishing is becoming more difficult” (BoKe1) and “the situation currently

is very bad. Before I heard our grandparents were using only 10 nets and come with many fish but nowadays you go fishing with 50 nets and it is hard to come with even 10 kg” (BcTz1). Furthermore, respondents associated this trend with illegal fishing practices. “In future our children will suffer because the catches and incomes from fisheries are reducing. The four years I have spent here I have noticed a sharp decline in fish catches. We used to bring like eight basins of Mukene per trip but nowadays we get like three basins if we have got a lot. That means our children will suffer.(...) What is causing the decline is that there are people who are engaging in illegal fishing. So fish will die off and fish stocks will decline” (BcUG1).

Overall, it was found that fishers expressed concern about the state of fish stocks and accepted the need for regulations. There was then little evidence that non-compliance is motivated by a belief that fish stocks are in a good condition and should be exploited or that regulations are superfluous.

#### *4.2. Challenging state legitimacy: the principle of autonomy*

Legitimacy has been defined as a reservoir of loyalty on which leaders can draw, giving them the discretionary authority of loyalty they require to govern effectively (Raakjær Nielsen 2003). In the case of fisheries this largely refers to the acceptance by fishers of rules and regulations, and the legitimacy of the state to interfere in fishing. In our four-part typology, the aim of fishers to be autonomous, and therefore not subject to regulation, reflects the principle of autonomy.

The literature on Lake Victoria fisheries has suggested that in the eyes of local users, open access to the fisheries is sometimes seen as a God given entitlement (Jentoft et al. 2010). According to this view, the state has no right to tell fishers when and where to fish, or which fishing methods to use. Non-compliance is therefore morally justified by the autonomy of fishers from the state. This has been reported in the fisheries literature which highlighted “how a strong emphasis on values of ‘independence’ and ‘autonomy’ in fishers’ occupational identity lead many fishers to naturally resent interference of authorities” (Boonstra et al., 2017: 11). When it comes to the findings of our research, however, the legitimacy of the state to interfere was almost completely unchallenged. According to most respondents, the need for government actions in regulating fishing on the lake was unquestionable: “Yeah! The government should get involved in fishing matters. They know what is good and what is bad for us and they have the right to tell us what to do” (BoKe2). Rather than questioning the right of governments to implement fishing regulation, the respondents called for action from the government: “Fishers are very environmentally destructive, therefore it is important for government to guide us for the sustainability of our fisheries resource” (BcTz2). Without government, “the fisheries would have in fact already collapsed” (BcTz3).

In the literature it has been reported that fisherfolk have historically had a stigmatized occupational identity, developing the feeling they are under attack by the media and policy makers (Urquhart et al. 2011: 244). However, our respondents accepted the state as their ally, rather than as an external actor from whom they need to defend their autonomy and independence. For the respondents, illegalities were strongly related to the issue of state legitimacy, but in the opposite sense, as the governments were criticized for doing too little in curbing illegalities. Inadequate fisheries management, including enforcement, was attributed to insufficient funding for monitoring, control and surveillance, corrupt officials allowing the continuation of illegal practices, the production and import of illegal gears and inadequate political support in fighting illegalities. Allowing the import of illegal gears, and forbidding

the fishers to use these gears, left one respondent from Uganda puzzled: “surely you cannot import something that you know will affect your country negatively. [Perhaps] government wants to tempt us the way Adam and Eve were tempted?” (laughs) (FtUg1). A boat crew suggested that “the way government ensures that bombs don’t get into this country should be the way government should ensure that illegal gears don’t get into the country or are not manufactured in this country” (BcUg2). Whereas Etiegni et al. (2011) ascribe a high degree of illegalities on the Lake Victoria to the low respect for government authority among the fishers, our data question the direction of that causal relationship and indicate that low respect for government authority may in fact be the result of governments’ failure to address prevalent illegalities.

Finally, even though our research has not confirmed that non-compliance can be explained by the lack of legitimacy of the government to interfere, the failure of the states to prevent the import of illegal gears has led to an alternative legitimacy problem. Why comply with state regulations if illegal gears can be legally bought? “People still fish illegally because you can find someone with a monofilament net and you ask that person ‘why are you using this net?’ And the person tells you that I am not the one who manufactures these nets and I am not the one who imports them into the country and besides we pay taxes for them and they are sold in shops, what do you want me to do?” (BoUg3). If anything, the role of the state, in the eyes of the respondents, should be even greater than it already is: “It is true fishing in the lake is God given but people misuse it therefore government should come in order to regulate. (...) Government has not done its work fully e.g. the use of beach seine and less mesh size has persisted. I think government has just surrendered the lake to fishers to destroy it. So government should add in more effort because it can order within a week and all the illegal fishing will be stopped” (BcUg4). This alternative legitimacy problem partly overlaps with the next principle which fishers use to justify non-compliance: the principle of futility.

#### *4.3. Lack of social trust: the principle of futility*

The alleged lack of compliance of other actors provides a special form of moral justification for the wrong-doers. According to the principle of futility, the legitimacy of fishing regulations is not diminished because of its source (as in the principle of autonomy), but because of the prevailing fishing practices of other resource users. This concerns the fishers’ disbelief that, even if they would cease using illegal methods, others would carry on with illegal fishing, and reflects the problem of lack of trust within natural resource management (Grafton 2005; Sekhar 2006; Stern & Coleman 2015). In the words of one respondent: “The bad gears are not good but if you see people use bad gears you also need food. I will use bad gears because everyone else is using a bad gear. In that case everyone will use bad gears” (BoKe3).

The existence of illegalities was widely acknowledged among the respondents, and the implications of knowledge of this for non-compliance resonated in their words: “When you tell fishers at this landing to comply with the rules and regulations, they ask you whether other BMUs are doing the same” (FtUg3). Asked if he would report someone using illegal fishing, a boat crew respondent from Uganda, said: “I would but you see this lake is big and almost all the landing sites have illegal fishers but they don’t report them. I would only report if such kind of reporting is being done on every landing site on Lake Victoria” (BcUg3). The hypothesis that the free rider problem can affect the persistence of illegal fishing by diminishing the legitimacy of the fishing regulation was supported by the data, as a number of respondents justified the use of illegal methods with the illegal behaviour of other fishers on the lake. However, in our interviews, we encountered two tendencies which mitigated the



free rider problem for the perpetuation of illegalities, and which therefore made the “tragedy of the commons” (Hardin 1968) a less likely outcome.

Firstly, a number of them perceived the volume of illegalities as decreasing: “Illegal fishing was open those days, even you [the interviewer] the time you have been here since morning you would have seen illegal gears”. However, “these days, you can even spend a whole month without seeing someone with illegal gears!” (BcUg1). The positive development was primarily associated with the work of BMUs and police enforcement: “In the past it was normal to see the beach seines around the lake, but nowadays illegal gears have decreased. It is good for police to be involved in patrol with fisheries officers because it improves safety in the Lake Victoria” (BcTz2). If the illegalities, in the view of the respondents, persisted, it was often only in the smaller and more distant landing sites, where the enforcement was not frequent.

The second finding concerned the perception of illegalities elsewhere on the lake. Even though some respondents seemed inclined to put the attribute illegal fishing to fishers from other districts or countries, most respondents had the opposite perception, holding that illegalities elsewhere were better enforced than in their own districts and countries. “The people who come from elsewhere do good fishing. The people here are the ones doing the bad gears” (BoKe4). Because illegalities are less tolerated elsewhere, “when some fishers go to those landing sites they come back regretting how they can’t manage fishing because those landings do not consider illegal fishing practices” (BoUg1). A similar pattern occurred when the respondents were asked about illegalities in other countries: only a few respondents put the blame for fish depletion on the use of illegal gears in other countries, while most assessed the level of illegalities in their own countries to be much higher.

Overall, the principle of futility was evident in the fisheries, demonstrated through perceptions of widespread illegalities, making it seem unworthwhile to invest in fishing through legal means.

#### *4.4. Poverty: the principle of necessity*

The final form of justification refers to the disadvantageous socio-economic status of fishers and the risks they face in providing for their livelihoods, which then dictated the choice of fishing methods. Since the use of illegal methods is considered a necessity rather than a choice, non-compliance becomes morally justifiable: “They [illegal fishers] fish illegally or use bad gears not because they like but it is poverty that makes people use bad gears. If they can be boosted, they would not be doing bad fishing gears” (BoKe2); “I have never been arrested but my friends have been arrested before. And normally, they are arrested even when they know that what they are doing is wrong. But because they need to survive and also due to weak laws they are able to practice illegal fishing” (BcUg3); “We were told that we should use 10 mm, but 10mm cannot catch omena [dagaa]. So we use the wrong gears because they are the ones that can catch the fish that we want. There are also some gears that catch the young Nile perch but because we must eat, we use those gears because we have no means” (BoKe1).

The negative effect of low financial status on the use of legal methods is reflected in three main ways: the illegal fishing gear with smaller mesh size allowed larger catches of fish than the fishing gear of the recommended mesh and hook size, at least in the eyes of the fishers; the high cost of legal fishing gear in comparison to nets used illegally (often this included

mosquito nets distributed free of charge to Lake Victoria residents);<sup>4</sup> and finally, the problem of frequent gear theft which put the respondents who had originally purchased legal gear at risk of losing it.<sup>5</sup> As many fishers see themselves as burdened with uncertainty, the principle of necessity sometimes overlaps with the principle of futility: “The bad gears are not good. But if you see people use bad gears you also need food. I will use bad gears because everyone else is using a bad gear. In that case everyone will use bad gears” (BoKe3). Thus, not only are the fishers forced to use illegal methods due to their poverty, but as many of them are in a similar position, it is assumed that the fisheries will eventually be depleted, which gives them moral justification to continue with illegal harvesting.

The importance of poverty also underlines the exposure to illegal fishing of marginal and vulnerable groups: “women are the most involved in illegal fishing. Because they do not have enough capital that would make one own a boat as result they resort to illegal fishing as their start up job” (BoUg4). This has repercussions on the level of participation of women in their BMUs as they “fear to speak up” in order to avoid accusations for breaking the law. The inferior position of the poorer populations within landing sites at the same time leave them vulnerable to exploitation on behalf of the fish agents and boat owners.

The necessity of using illegal methods is closely related to the short-term perspective which the fishers felt they were forced to accept: “People use illegal gears such as undersize gillnets, beach seines and monofilaments just to get income and food for survival and they are just concerned with their present situation without considering the future” (BcTz4). Since their actions are framed as a desperate means of survival—as they do what they can to sustain themselves today, delaying worries about what comes tomorrow—the results indicate that fishers are not disinterested in the future of fisheries. Numerous respondents expressed strong identity related to their occupation, satisfaction with their job, and have a strong desire to continue working as fishers. This confirmed the importance of “fishing as a way of life” (Trimble & Johnson 2013), providing additional evidence against the assumption that fishing is an employment of last resort.

The idea that people are destroying the resources for tomorrow because of the lack of long-term perspective in the lake fisheries is well reported in the literature. Etiegni et al. (2011) talk of the market logic which dictated a strategy of stock exploitation to the point of economic extinction, to gain a short-term high return which can be reinvested elsewhere. Barratt et al. (2014) established that there are various long-term strategies that people adopt if they are reluctant to continue working as fishers: investing in assets away from the landing

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<sup>4</sup> The estimates varied, but illegal gear were always perceived as less expensive: 100,000-300,000 UGH (25\$-80\$) in comparison to 2-4 million UGH (550\$-1,100\$) for recommended nets in Uganda; or 300,000-600,000 TZS (130\$-270\$) in comparison for 8 million TZS (3,580\$) for a complete set of legal gears in Tanzania. Whereas buying the right fishing gears would require one to get a bank loan, according to one respondent, one could buy monofilament nets just by selling one goat. Furthermore, the choice of illegal gears was closely related to the costs of additional equipment. Legal fishing gears necessitate a lot of space, which is why those who fish using legal gears use distant fishing grounds with the help of motor engines. However, most fishers use paddles, which limits them to fishing grounds that are near the mainland. Finally, besides specific types of propulsion, the use of illegal gear often comes with smaller boat size: “To make the boat is also expensive so some people use small gears and cheap boats to fish in breeding areas because they need food and to live” (BcKe3). As a result, illegal fishers often operate inshore where recommended gears do not work.

<sup>5</sup> Even if the fishers had the right gear, several respondents mentioned the problem of keeping the recommended gear, due to being targeted by thieves. “If you try to use good gears and put it in the waters, it will soon be stolen. The people here are using illegalities. This is the type of fishery we have here. There is nothing we can do about it” (BcKe2). This was confirmed by numerous respondents: “The problem is theft on the lake. One struggles and buys a legal gear and then the thieves come and steal it. Moreover, one could have got a loan to buy the legal gears so one remains suffering paying the loan even when the gears for which he used the money have been stolen” (BcUg5). Unlike authorised gears, safeguarding an illegal gear is very easy: “These other authorised nets can be stolen. The engines are stolen, but if you have your illegal gear like a boat seine, it is very portable. It does not weigh more than 30 kilos, so after fishing you just carry it to your house. In the lake you are with it, so it is safe” (FoUg).

sites and investing in the education of their children, as a mechanism of inter-generational upward mobility. However, these explanations are grounded in the instrumental logic: the fishers who extract maximum quantities of fish in the short term are presented as typical economic rational-choice agents who are led by interests rather than norms. Yet the goal of the normative approach taken in this paper is to observe how these conditions provide moral justification for non-compliance, acting as a mechanism which undermines the legitimacy of the fishing regulation. In other words, even behaviour traditionally assigned to the economic models was formulated in moral terms.

## 5. Discussion

Understanding of motivations for non-compliance is central to improving the effectiveness of regulations and enforcement (Kuperan & Sutinen 1998). Four modes of justification were identified from literature on fisheries compliance and from the fieldwork data, based on: superfluity of the fisheries regulation due to differences in local-ecological knowledge; feelings of autonomy from the state due to the lack of state legitimacy; alleged futility of attempts to prevent illegalities due to the free rider problem; and, necessity caused by poverty. Table 1 summarizes the nature of, and literature supporting, the four modes of justification.

**Table 1 Summary of modes of justification of fishers' non-compliance**

Principle	Justification	Common good	References
Superfluity	Abundance of fish makes regulations superfluous	Knowledge	Crona and Bodin (2006; 2010), Boonstra et al. (2017)
Autonomy	Fishing as a natural entitlement—the state has no right to interfere	Freedom	Jentoft et al. (2010), Urquhart et al. (2011), Boonstra et al. (2017)
Futility	Attempts to prevent depletion are futile—free rider problem	Trust (or the lack thereof)	Grafton (2005); Sekhar (2006), Stern & Coleman (2015)
Necessity	Right to survive—short-term perspective	Survival	Arias et al. (2015)

Each mode of justification relies on a specific notion of common good which provides moral legitimization for the non-compliant behaviour: privileged access to knowledge, which allows the non-compliant fisher to assess whether the ban of certain fishing methods is needed; sense of freedom from the state to make decisions autonomously from the required regulation; the lack of trust in fellow fishers to cease illegal practices; and, the short-term notion of surviving, based on the general anthropocentric value of human life as a supreme good.

The modes of justification are not entirely separate or mutually exclusive. Linkages between different modes are evident in the nature of the justification and in the way people articulate reasons for non-compliance. For example, a fisher may believe that government has the right to set and enforce regulations, yet believe that certain regulations are 'superfluous' or inappropriate. This suggests that whilst government may have legitimacy in the eyes of fisherfolk in fisheries management, certain regulations may lack legitimacy and undermine compliance. As a further example, fishers may accept government authority but believe it is futile to fish legally given the lack of enforcement or the superfluity of certain regulations. However, despite interconnections between different principles, each of them can provide a coherent justification for non-compliant behaviour.

The results show that the fishers from Lake Victoria in general do not try to deny the trend of fish depletion, and acknowledge the right of the state to interfere in fishing practices. There is little evidence that fisheries regulations are seen as superfluous as the majority of respondents reported belief that there has been a decline in fish stocks and catch and that this should be addressed through greater action, including through enforcement, by governments. The authority of government to develop and enforce regulations was not questioned despite concern raised about the performance of government in this regard. This lack of enforcement and wider effective fisheries management contributed to non-compliance being justified by the principle of futility; why comply when there is so much illegality? The data suggested that the use of illegalities is motivated to a larger extent by the alleged non-compliance of the other fishers—although in the perception of the respondents, the scope of illegalities seemed to be decreasing, and mostly concerned their home region. Finally, the principle of necessity led people to argue that they have no choice, given the state of the fisheries but to fish illegally. This finding is in line with Gezelius (2004) who found that illegalities may be socially accepted if the fish is for household consumption rather than for commercial gain, though in the case of Lake Victoria, poverty as a justification for illegalities provides a justification for the capture and sale of fish to secure livelihoods, which may include paying rent, buying food and paying school fees.

Even though the importance of poverty for non-compliance was related to the fishers' short term logic, as several authors have suggested (Etiegni et al. 2011; Barratt et al. 2014), in this paper the lack of long term perspective was seen as part of the normative mechanism, rather than instrumental logic. In the works by Etiegni et al. (2011) and Barratt et al. (2014), fishers' short term perspectives have led to assumed rational choice decision-making, based on the calculation of potential gains and risks, with fishers ready to draw high short term returns in order to invest these in other areas. In this analysis, however, a short-term approach to fishery sustainability (the problem of overharvesting) is explained as part of the moral argument. Hence, non-compliance does not represent an investment strategy of rational choice actors, but rather a behaviour grounded on essentially moral justifications.

The typology developed in this paper bears some similarity to the typology of motivational sources in fisheries compliance, presented in a recent piece of scholarship by Boonstra et al. (2017). They identify different types of responses towards regulation and authorities in the case study of Swedish Baltic fisheries. Four possible behavioural responses are listed in their framework: commitment (endorsement of regulation), resistance (dismissal of fishing authority), creativity (rule elusiveness), and reluctance (disengagement). Both papers go beyond binary interpretation of fishers' behaviour (following rules vs not following rules), allowing cross-fertilization of concepts and ideas from different fields of research (sociology, anthropology, philosophy, cognitive science), on the one hand, and the study of natural resource management on the other. However, despite partial overlap between the two typologies, the framework developed in this paper is different in two ways. Firstly, Boonstra et al. offer a general typology of fishers' behaviour, whereas the typology presented in this paper is focused specifically on non-compliance. Secondly, whereas morality plays an important role in outlining fishers' responses in Boonstra et al., the typology developed in this paper addresses distinctive moral mechanisms rooted in competing conceptions of common good.

## 6. Conclusion

This article sought to identify and explore moral justifications for non-compliance with fisheries regulations, drawing on literature and research data. It contributes to the literature on normative explanations for non-compliance, in which it is increasingly recognized that a variety of non-monetary incentives, such as legitimacy of regulations and authority and morals and norms, as experienced through group behaviour and social pressure, impact on fishers' behaviour (Raakjær Nielsen 2003). Moral justifications reflect people's experiences and perceptions of fisheries management and practices, as well as wider livelihood options and choices and the perceptions of enforcement and governance within wider society. In the tradition of economic sociology, the paper thereby demonstrates that fishing activity is embedded in broader social and cultural structures of beliefs and values. Even though this is not the first time that fishers' non-compliant behaviour is linked to the sphere of morality, it is first, to the best of our knowledge, to provide a systematic overview of moral resources used to ground the use of illegal practices in alternative visions of fairness.

The typology of moral justifications was found to facilitate a more nuanced analysis of reasons given for non-compliance and application of the typology brought out the interconnections between them. Recognition of linkages between the justifications, as well as the justifications themselves, have implications for measures taken to curb illegalities on Lake Victoria and elsewhere, as different motivations behind compliance behaviour require different regulatory strategies to promote compliance (Boonstra et al. 2017). The results indicate that fisheries stakeholders from the lake are in general inclined to support measures which would stop overharvesting. Fishers do not reject the role of the state in solving problems, nor do they deny the problems exist; according to our data, they understand the problems related to illegalities and want to cooperate with other stakeholders in solving these problems. Even though measures such as closed seasons or protecting breeding grounds would limit their activities and endanger their incomes from fishing, a significant number of the respondents supported these measures, as long as they improve the fisheries. However, it is important that there is assistance available to fishers so that they can help themselves. The availability of micro-credit to access legal fishing gear, as well as more prevention of gear theft, in this respect seems to be crucial for further addressing non-compliance on the lake.

It should be noted that the analysis presented in this paper has a number of limitations. Although the use of qualitative methods enabled collation of in-depth perspectives on the metrics of worth used by the respondents who justified the use of illegal methods, the small N sample made it impossible to conclude if the results are generalizable to the broader population. The results of the research could be therefore tested using quantitative methods. Secondly, the research based on in-depth interviews is better equipped for examining morality in its discursive, rather than behavioural aspect. Ethnographic research of competing moralities based on long-term participant observation would, on the other hand, be more fitting to studying what happens when these justifications are translated to social acts, and how moralities work in practice. The final limitation pertains to the cultural embeddedness of the moral categories. Can it be expected that fishers in Sweden or Chile use the same cultural repertoire of justifications as fishers in East Africa? The typology should be tested cross-culturally, in small-scale fisheries contexts and co-management systems significantly different from the setting of Lake Victoria.

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